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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/532,190   | 04/21/2005  | Rolf Koenenkamp      | 21141/0210503-US0   | 8427             |
| 7278 7590 02/06/2009<br>DARBY & DARBY P.C.<br>P.O. BOX 770<br>Church Street Station<br>New York, NY 10008-0770 |             |                      |                     |                  |
| EXAMINER   |             |                      |                     |                  |
| DANG, PHUC T   |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 2892   |             |                      |                     |                  |
| MAIL DATE  |             | DELIVERY MODE        |                     |                  |
| 02/06/2009   |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/532,190

**Applicant(s)**

KOENENKAMP, ROLF

**Examiner**

Phuc T. Dang

**Art Unit**

2892

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on RCE filed on 12/23/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 2-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-850)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 12/23/2008

#### **DETAILED ACTION**

1. This application is a 371 of PCT/DE03/03673 filed on October 29, 2003.

#### **Request for Continued Examination (RCE)**

2. Request for Continued Examination (RCE) filed on December 23, 2008 has been acknowledged and considered.

In Request for Continued Examination (RCE), claims 2-8 are remained for examination at this time.

Claims 2-8 are currently still pending in the application.

#### **Information Disclosure Statement**

3. The office acknowledges receipt of the following items from the applicant:  
Information Disclosure Statement (IDS) filed on December 23, 2008.

#### **Drawings**

4. The drawings are objected to because there is no figure showing the third insulating layer is deposited on the laminate with subsequent renewed planar etching as claimed in claim 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### **Claim Objections**

5. Claim 2 is objected to because of the following informalities:

In claim 2, lines 9-10, the term "... the first metal layer ..." should change to -- ... the first conductive metal layer ... --.

In claim 2, lines 11 and 15, the term "... the metal layer ..." should change to -- ... the first conductive metal layer ... --.

In claim 2, line 17, the term "... a second metal layer ..." should change to -- ... a second conductive metal layer ... --.

#### **Allowable Subject Matter**

6. Claims 2-8 would be allowed.

The following is a statement of reason for the indication of allowable subject matter:

Claims 2-8 are considered allowable since the prior art of record and the considered pertinent to the applicant's disclosure does not teach or suggest the claimed invention having the developing laminate is etched planar to the point of the portion of the first metal layer covering the semiconductor columns is removed again; and the end of the first metal layer penetrating to the surface of the laminate are etched back in a metal-specific manner and a third insulating layer

is deposited on the laminate with subsequent renewed planar etching; or the ends of the first conductive metal layer penetrating to the surface of the laminate are converted to an insulator by oxidizing or nitriding as cited in claim 2.

Claims 3-8 are depend on claim 2.

Claim 2 would be allowable if rewritten or amended to overcome the claim objection(s) set forth in this Office action.

### **Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (U.S. Patent No. 6,379,569 B1) and (U.S. Patent No. 7,259,023 B2).

8. Applicants are advised to cancel the non-elected claims 23-34 upon response to the next Office action if the application is considered to be allowed.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuc T. Dang whose telephone number is 571-272-1776. The examiner can normally be reached on 8:00 am-5:00 pm.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thao X. Le can be reached on (571) 272-1708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and Final communications.

11. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

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/Phuc T Dang/

Primary Examiner, Art Unit 2892